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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,638	04/22/2005	Paul Francis Clarke	3700.P0392US	5662
23474 7590 02/17/2010 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631				
EXAMINER				
HOOVER, MATTHEW				
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1791				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,638

Applicant(s)

CLARKE, PAUL FRANCIS

Examiner

MATTHEW HOOVER

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed 11/23/09 has been entered. Claims 1-15 and 17-24 remain pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-9, 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes (US 4807647) in view of Yoshida (US 6206007).

Regarding claims 1-3, 5-7 and 19-22 Hayes teaches an upstream filter with a high pressure drop (draw resistance) filter and a second downstream low pressure drop filter (abstract). Figure 4 shows the wrapper (#6) which wraps around the component

and provides ventilation and defines the cavity (abstract). Hayes also teaches that the high draw resistance upstream filter has tar retention of 12% (table 2) and the low draw resistance (downstream) filter has a tar retention of 30% (column 49-55), with a specific example of 27% (table 2).

Hayes does not disclose that the draw resistance for the downstream filter is greater than the upstream filter's draw resistance.

Yoshida teaches a dual filter smoking article in which the up stream filter has a draw resistance of 25 mmWG and can decrease to 12.5mmWG (column 9 lines 46-53, 61-67 and column 10 lines 1-4). It also teaches that the downstream filter has a draw resistance of 75mmWG (column 9 lines 46-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the filter in Hayes with filter from Yoshida. The rationale to do so would have been the motivation provided by the teaching of Yoshida that to do so would predictably provide a decrease in tar and nicotine (column 8 lines 64-67 and column 9 lines 1-7).

Regarding claim 4, the teachings of Hayes and Yoshida are disclosed above.

Neither Hayes nor Yoshida teaches that the tar retention for the down stream filter is between 35-45%.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the specified tar retention range. Since it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover

the optimum or workable ranges by routine experimentation.” See MPEP 2144.05(II)(A) and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

Regarding claims 8-9, the teachings of Hayes and Yoshida are disclosed above. Hayes also teaches that the filter wrapper provides ventilation, which means it is air permeable (abstract).

Regarding claims 11-14, the teachings of Hayes and Yoshida are disclosed above. Hayes also teaches that the filter and tobacco rod are joined by a permeable ventilating tipping overwrap which has ventilating perforations, which would register with the cavity (column 1 lines 43-54). The filter paper wrap is also air permeable (column 1 lines 5-27). The many perforations inherently allow air to pass through the components into and out of the cavity in any direction, which would include laterally.

Regarding claim 17, the teachings of Hayes and Yoshida are disclosed above. The filter (figure 2 #2 and 4) is attached to a tobacco rod (figure 2 #8), which is wrapped (column 1 lines 39-62).

Regarding claim 18, the teachings of Hayes and Yoshida are disclosed above.

Hayes does not teach the joining of multiple filters end to end in mirror image relationship.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use multiple filters since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See MPEP 2144.04(VI)(B) and see *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). The invention of Hayes is of a multiple filter cigarette filtration device in which the filters (figure 2 #2 and 4) are attached end to end (figure 2). It would have been obvious to add multiple filters since it is already taught in the original invention to have more than one filter, thereby improving filtering ability and removal of CO.

Regarding claim 23, the teachings of Hayes and Yoshida are disclosed above.

Regarding claim 24, the teachings of Hayes and Yoshida are disclosed above.

Claims 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes (US 4807647) in view of Yoshida (US 6206007) and in further view of Banerjee (US 5839449).

Regarding claim 15, the teachings of Hayes and Yoshida are disclosed above. Hayes also teaches that the CO delivery is 5mg and that CO/tar delivery rate is 0.5 (table 3).

Neither Hayes nor Yoshida teaches that the CO delivery is less than 5 mg.

Banerjee teaches a multiple filter cigarette and a method of making that has a CO delivery of 4.9mg (column 5 lines 1-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the filter in Hayes and Yoshida multiply to obtain the CO amount from Banerjee. The rationale to do so would have been that CO is bad for ones health, which is commonly known in the art. Therefore it would have been obvious to use the process disclosed in Banerjee to reduce the CO, while still trying to provide a good tasting cigarette (column 2 lines 53-62).

Response to Arguments

Applicant's arguments, see applicant's arguments and remarks, filed 11/23/09, with respect to the rejection(s) of claim(s) 1-9 and 10-24 under U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hayes (US 4807647) in view of Yoshida (US 6206007) and in further view of Banerjee (US 5839449).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW HOOVER whose telephone number is (571)270-7663. The examiner can normally be reached on Mon-Thurs 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katarzyna I. Wyrozebski can be reached on (571) 272-1127. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MH/
Examiner AU1791

/KHANH NGUYEN/
Primary Examiner, Art Unit 1791